AMENDMENTS TO THE SPECIFICATION

Please replace paragraphs 0030, 0031, 0033, 0040, and 0043 with the following amended paragraphs:

[0030] Diaphragm 18 is connected to support 16 by rivet 20. In one embodiment, diaphragm 18 is a ~~silastic~~ Silastic (i.e. a silicone elastomer) material, approximately 0.4 mm thick that is approximately 1/50 the outer diameter of the diaphragm, and it has an axial hole through which passes rivet 20. For example, the diaphragm may be a transparent, low modulus silicone sheet, such as Dow Corning Silastic, medical grade.

[0031] Rivet 20 may be made of the same material as valve base 14 and connector 12. It is shown in FIGS. 3 and 4 compressed into its final configuration. In one embodiment, rivet 20 has a head 20a and a shank 20b approximately 3 mm in length when initially inserted through the axial hole of the diaphragm and the axial hole 34 of supporting disk-shaped member 32, and before compression. After compression, part of shank 20b has "mushroomed" into staked end 20c. (Head 20a is not changed.) Rivet 20 also has a cylindrical axial bore hole 20d extending completely through its head 20a, shank 20b and staked end 20c. Rivet 20 contains slit valve 21 at its inlet end, in ~~shank~~ staked end 20c. In one embodiment, slit valve 21 is made of a similar material to diaphragm 18, for example, a transparent, low modulus silicone, such as Dow Corning Silastic, medical grade. In one aspect, slit valve 21 has a diameter of about 1.5 mm and a thickness of about 0.1 mm. Its slit is about 1.2 mm long.

[0033] In another embodiment, seating ring 36 is raised approximately 0.4 mm from the inner face of support 16. As shown in FIGS. 3 and 4, the bottom of seating ring 36 extends below the bottom surface of the rest of support 16, such as the bottom of crosspiece 28, by a distance that is approximately 0.4 mm. Thus, if rivet 20 is given about 0.2 mm of end play after compression, it preloads diaphragm 18 approximately 0.2 mm toward seating ring 36. (As shown in FIG. 3, if the air gap between the top of diaphragm 18 and the bottom of crosspiece 28 of support 16 is about 0.2 mm, then about 0.2 mm of the thickness of diaphragm 18 (which is about 0.4 mm thick) will have to be moved up above the bottom of seating ring 36 and into the

space enclosed within the seating ring. This occurs because the distance between the bottom of crosspiece 28 and the bottom of seating ring 36 is about 0.4mm). That is, considering the "central portion" of diaphragm 18 to be that portion thereof immediately surrounding rivet 20, as shown in FIG. 4, the upper part of the central portion of diaphragm 18 is pressed into the lower part of the space surrounded by the bottom of seating ring 36. Approximately half of the thickness of diaphragm 18 is above an imaginary plane laterally extending across the very bottom of seating ring 36, and approximately half of said thickness is therebelow. As shown in FIG. 4, however, the amount of extension of diaphragm 18 into said space is slightly exaggerated, in order to make it easier to visualize the structure. This amount of preloading results in a bias equivalent to approximately 8 to 15 mm of water head, with the about 0.4 mm ~~silastic~~ Silastic diaphragm described above, and makes diaphragm 18 seat completely against seating ring 36. This produces an effective closure that maintains a positive, uninterrupted contact all along the seating ring.

[0040] Diaphragm 48 is connected to support 46 by rivet 50. In one embodiment, diaphragm 48 is a ~~silastic~~ Silastic material, approximately 0.4 mm thick that is approximately 1/50 the outer diameter of the diaphragm, and it has an axial hole through which passes rivet 50. For example, the diaphragm may be a transparent, low modulus silicone sheet, such as Dow Corning Silastic, medical grade.

[0043] In another embodiment, seating ring 66 is raised approximately 0.4 mm from the inner face of support 46. As shown in FIG. 6, the bottom of seating ring 66 extends below the bottom surface of the rest of support 46, such as the bottom of crosspiece 58, by a distance that is approximately 0.4 mm. Thus, if rivet 50 is given about 0.2 mm of end pay after compression, it preloads diaphragm 48 approximately 0.2 mm toward seating ring 66. (As shown in FIG. 6, if the air gap between the top of diaphragm 48 and the bottom of crosspiece 58 of support 46 is about 0.2 mm, then about 0.2 mm of the thickness of diaphragm 48 (which is about 0.4 mm thick) will have to be moved up above the bottom of seating ring 66 and into the space enclosed

within the seating ring. This occurs because the distance between the bottom of crosspiece 58 and the bottom of seating ring 66 is about 0.4mm). That is, considering the "central portion" of diaphragm 48 to be that portion thereof immediately surrounding rivet 50, as shown in FIG. 6, the upper part of the central portion of diaphragm 48 is pressed into the lower part of the space surrounded by the bottom of seating ring 66. Approximately half of the thickness of diaphragm 48 is above an imaginary plane laterally extending across the very bottom of seating ring 66, and approximately half of said thickness is below the plane. As shown in FIG. 6, however, the amount of extension of diaphragm 48 into said space is slightly exaggerated, in order to make it easier to visualize the structure. This amount of preloading results in a bias equivalent to approximately 8 to 15 mm of water head, with the about 0.4 mm ~~silastic~~ Silastic diaphragm described above, and makes diaphragm 48 seat completely against seating ring 66. This produces an effective closure that maintains a positive, uninterrupted contact all along the seating ring.